

What is claimed is:

1. A system for concurrently displaying respective images representing real-time data and non-real-time data, comprising:  
a source of signals representing real-time data;  
a source of signals representing non-real-time data;  
a display device for displaying images;  
a processor, coupled to the real-time data source, the non-real-time data source and the display device, the processor:  
executing a windowing operating system  
controlling the operation of an application program for receiving non-real-time data and conditioning the display device to display an image representing the non-real-time data; and  
executing a real-time display process, independent of the execution of the operating system, for receiving the real-time data and conditioning the display device to display an image representing the real-time data concurrently with the display of the non-real-time data.

2. The system of claim 1, wherein:  
the real-time data signal source is a network with a specified latency limit; and  
the real-time display process receives the real-time data and displays the real-time data representative image within the specified latency limit.

3. The system of claim 1 wherein the real-time display process operates as a single thread.

1        4.    The system of claim 3 wherein the real-time display  
2 process thread is assigned a priority higher than the  
3 application program.

1        5.    The system of claim 3 wherein:  
2        the windowing operating system provides a graphics display  
3 interface for conditioning the display device to display a  
4 specified image; and  
5        the real-time display process thread provides instructions  
6 to the graphics display interface to display the real-time  
7 image.

1        6.    The system of claim 1, wherein:  
2        the application program may malfunction such that the non-  
3 real-time data representative image obscures the real-time data  
4 representative image;  
5        the system further comprises a source of user input  
6 signals; and  
7        the processor, in response to a user input signal, reveals  
8 the real-time data representative image.

1        7.    The system of claim 6 wherein the user input signal  
2 source comprises a keyboard, and the user input signal comprises  
3 a key combination.

1        8.    The system of claim 6 wherein the user input signal  
2 source comprises a mouse, and the user input signal comprises a  
3 mouse click.

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9     respective images representing the non-real-time data;  
10         executing a real-time display process, independently of the  
11     windowing operating system, for conditioning the display device  
12     to display respective images representing the real-time data  
13     concurrently with the display of the non-real-time data.

1         13. The method of claim 12 further comprising the step of  
2     executing the real-time display process as a single thread.

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1 17. The method of claim 16 wherein the step of receiving  
2 user input data comprises the step of receiving a key  
3 combination from a keyboard.

1 18. The method of claim 16 wherein the step of receiving  
2 user input data comprises the step of receiving a mouse click  
3 from a mouse.

1 19. The method of claim 12 wherein:  
2 the step of executing the windowing operating system  
3 comprises the step of maintaining information relating to the  
4 availability of resources; and

5 the method further comprises the step of:  
6 executing a monitor process for  
7 monitoring the resource information; and  
8 taking corrective action if the resource  
9 information indicates that the availability of a  
10 resource is below a predetermined level.

1 20. The method of claim 19 wherein the step of monitoring  
2 the resource information comprises the steps of:  
3 monitoring memory resources;  
4 monitoring system resources;  
5 monitoring computer resources; and  
6 monitoring process resources.

1 21. The method of claim 19 wherein the step of taking  
2 correcting action comprises the steps of:  
3 modifying execution parameters of the application program;

- 4 terminating the application program; and
- 5 sending a notification to the user.

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